

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-013124**Date Inspected:** 11-Apr-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Li Yang and Wu Zhi Cheng	CWI Present:	Yes	No
Inspected CWI report:	Yes No N/A	Rod Oven in Use:	Yes	No N/A
Electrode to specification:	Yes No N/A	Weld Procedures Followed:	Yes	No N/A
Qualified Welders:	Yes No N/A	Verified Joint Fit-up:	Yes	No N/A
Approved Drawings:	Yes No N/A	Approved WPS:	Yes	No N/A
		Delayed / Cancelled:	Yes	No N/A

Bridge No: 34-0006**Component:** OBG Trial Assembly**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) Trial Assembly Areas

Segment 7DW

This QA Inspector along with Caltrans QA Inspector Mr. Manikandan measured and recorded the Vertical and Horizontal Offset for the T-Ribs to T-Ribs at FL3 Location for Segment 7DW between Panel Point (PP) 56 to PP 56.5; PP 57 to PP 57.5 and PP 57.5 to PP 58. The Buckling for the T-Ribs Web below the Floor Beam measured and recorded at PP 56, PP 57 and PP 58. The measured readings were submitted to Engineer and Team Leader for further action.

Segment 7CE to 7DE

This QA Inspector observed ZPMC welding personnel performing welding for weld joint SP533-001-051/53, SP533-001-055/057, SP533-001-059/061 and SP533-001-063. Welder is identified as 221146 and 222396 located on PMCK T-Ribs to T-Ribs Web, Side Panel Cross Beam Side. In process Flux Cored Arc Welding (FCAW) appears to be progressing in compliance with Caltrans Engineer Approved welding procedure

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WPS-B-T-2233-B-U2-F.

Segment 7CE to 7DE

This QA Inspector observed ZPMC welding personnel performing welding for weld joint SP613-001-044/046, SP613-001-044/046, SP613-001-052/054. Welder is identified as 068920 located on PMCK T-Ribs to T-Ribs Web, Side Panel Cross Beam Side. In process Flux Cored Arc Welding (FCAW) appears to be progressing in compliance with Caltrans Engineer Approved welding procedure WPS-B-T-2233-B-U2-F.

Segment 7AE to 7BE

This QA Inspector observed ZPMC welding personnel performing welding for weld joint Seg036-047. Welder is identified as 053753 located on PMCK Deck Panel to Edge Panel. In process Shielded Metal Arc Welding (SMAW) appears to be progressing in compliance with Caltrans Engineer Approved welding procedure WPS-345-SMAW-2G (2F)-FCM-Repair-1. Welding was in progress against Critical Weld Repair Record no. B-CWR1325.

Segment 7AE

This QA Inspector observed ZPMC welding personnel performing welding for weld joint CA033-002. Welder is identified as 066258 located on PMCK Deck Panel to Edge Panel. In process Shielded Metal Arc Welding (SMAW) appears to be progressing in compliance with Caltrans Engineer Approved welding procedure WPS-345-SMAW-4G (4F)-FCM-Repair-1. Welding was in progress against Critical Weld Repair Record no. B-CWR1325.

Segment 7AE to 7BE

This QA Inspector observed ZPMC personnel at Segment 7AE to 7BE Transverse Segment area bolts installation is in progress at U-Ribs to U-Ribs, T-Ribs to T-Ribs at Bottom Panel, T-Ribs to T-Ribs at Side Panel (Cross Beam and Side Panel side) with splice plates on.

Segment 7BE

This QA Inspector observed ZPMC personnel performing Magnetic Particle Test (MT) at all the welds of Longitudinal Diaphragm to Longitudinal Diaphragm at E4 location. Please refer the pictures attached below for more comprehensive details.

Segment 7DE

This QA Inspector observed ZPMC personnel at Segment 7DE between Panel Point (PP) 56 to PP 56.5; PP 57 to PP 57.5 and PP 57.5 to PP 58 FL3 areas Side Panel T-Ribs to T-Ribs splice plates installation was in progress.

Segment 7DE to 7EE

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This QA Inspector observed ZPMC personnel at Segment 7DE to 7EE between Panel Point (PP) 58 to PP 59 Segment to Segment Fit-up is in progress for Transverse Splice weld. Bottom Panel T-Ribs to T-Ribs hold back areas grinding is in progress for welding.

Segment 8AE

This QA Inspector observed ZPMC personnel at Segment 8AE at Point (PP) 64 Deck Panel Bevel preparation was in progress, Side Panel Cross Beam side flame cutting of excess base metal is in progress.

Segment 7EE

This QA Inspector observed ZPMC personnel at Segment 7EE at Panel Point (PP) 59 Lower Chevron I-Beam Installation to Floor Beam by means of ASTM A 325 Bolts was in progress at E4 Location. Please refer the pictures attached below for more comprehensive details.

Segment 7DE

This QA Inspector observed ZPMC personnel at Segment 7DE between Panel Point (PP) 56 to PP 57, PP 57 to 58 at FL3 extension area Partial Height Diaphragm installation is in progress.

Segment 7DW

This QA Inspector observed ZPMC personnel at Segment 7DW between Panel Point (PP) 56 to PP 57 and PP 58 FL3 flange to Bottom Plate area match drilling is in progress. Please refer the pictures attached below for more comprehensive details.

Segment 7CW to 7DW

This QA Inspector observed ZPMC personnel at Segment 7CW to 7DW Segment to Segment fit-up is in progress.

Segment 7CW

This QA Inspector observed ZPMC personnel at Segment 7CW at W2 location Edge Panel to Deck Panel Corner welding repair welding is in progress.

Segment 7AW and 7BW

This QA Inspector observed ZPMC personnel at Segment 7AW to 7BW between Panel Point (PP) 49 to PP 50 T-Ribs to T-Ribs hold back visual discontinuities welding is in progress welder identified as 205098. De-burring of the T-Ribs holes was in progress.

Segment 7BW

This QA Inspector observed ZPMC personnel at Segment 7BW between Panel Point (PP) 50 to PP 51 Catwalk

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channels installation on Bottom Panel T-Ribs to Floor Beam flange is in progress.

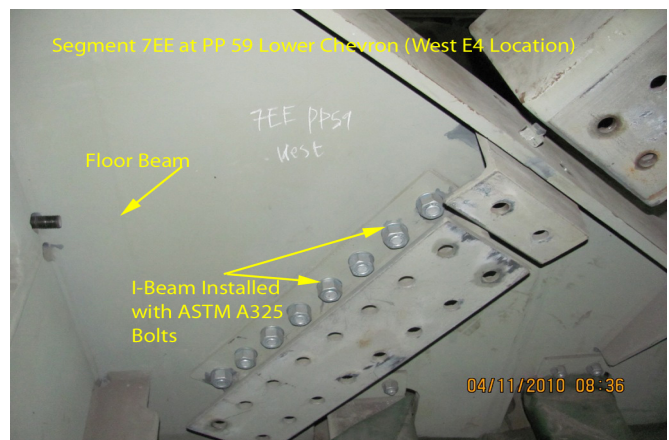
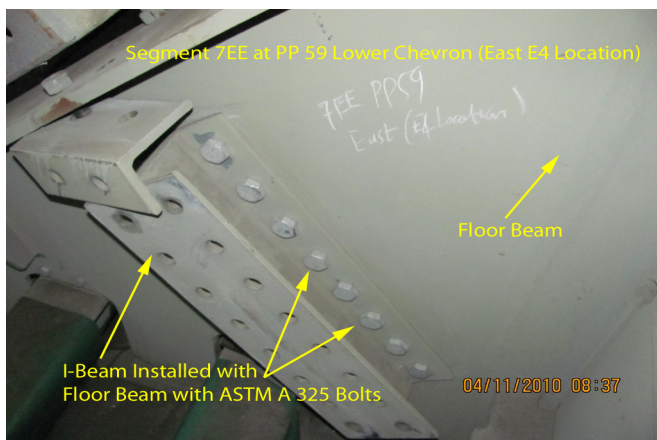
Segment 7BW to 7CW

This QA Inspector observed ZPMC personnel at Segment 7BW to 7CW between Panel Point (PP) 52 to PP 53 areas T-Ribs to T-Ribs at Bottom Panel (Side Panel Cross Beam and Counter Weight Side) match drilling is in progress at Flange area.

Segment 7CW

This QA Inspector observed ZPMC personnel at Segment 7CW at Panel Point (PP) 55 Side Panel Cross Beam side T-Ribs connecting to the Floor Beam bolt installed and Turn of Nut is in progress.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or

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remedial efforts please contact Eric T Sang 1500-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Math,Manjunath	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer
